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The Effect of Portfolio Choice of Risk and Ambiguity Aversion on Entrepreneurial Intention Moderated by Gender

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ABSTRACT

Entrepreneurial intentions may be one important factor in overcoming the problem of unemployment. With the intention of entrepreneurship, it can be a forerunner to a person to open their own business or become self-employed and do not rely on the work provided by others. This study examined the role of portfolio choice of risk and ambiguity aversion to entrepreneurial intentions. The study also examined the influence of gender on the relationship between the two variables. This study used survey methods in collecting data, and the number of respondents in this study were as many as 1032 students. The results showed the effect of portfolio choice of risk to the intention of entrepreneurship, while the choice of ambiguity aversion portfolio showed no effect. Factors relating to the moderation of gender, the results showed that there is a difference between men and women in terms of entrepreneurial intentions. Men are more shows entrepreneurial intentions than women.

Keywords: Entrepreneurial intention, portfolio choice of risk and ambiguity aversion, gender.

1. INTRODUCTION

Entrepreneurial intentions is the starting point for someone to become an entrepreneur, because in it there is no intention or desire to establish a business. This becomes very important because with entrepreneurial intentions, became a starting point one can help the problem of unemployment that exist, and therefore had no intention to build and develop a business and can ultimately create jobs. Improving entrepreneurial intentions are very important in the community, especially among students. Because this can be a provision for them, especially after they graduated from college lecture. As we have seen the unemployment rate in Indonesia still very high, things got worse will happen if the students were current after graduation decided a career just to be an employee, meaning that they expect the jobs that exist padahal today it is very difficult to obtain.

Several previous studies on the level of entrepreneurial intentions within student in Indonesia showed positive results. Christian (2000), examined students from Batak and found that 65% of respondents have intentions to become entrepreneurs. Another study conducted by the Lie (2004) of the students who come from Bali showed 74% of the total 105 respondents have intentions to become entrepreneurs. Christine (2004) studied 105 ethnically pure Chinese students and the results show 47% want to become entrepreneurs. Gerald (2006) examined 194 students who come from Java and the results showed 53% had a desire to become entrepreneurs. What is interesting here is how to improve the entrepreneurial intentions?

Improving entrepreneurial intentions can be done by looking at the factors that can influence it. Research from Kadir et. al., (...) indicates that the attitude factors, behavioral factors, educational support effect on entrepreneurial intentions. Research Ghazali, et. al., (2013) showed that the attitude factors, behavioral factors, and entrepreneurship training effect on entrepreneurial intentions. One of the factors that can influence the selection of the attitude of a person to have the intention of entrepreneurship is an attitude towards risk factors. Several studies discuss the influence attitudes towards risk on entrepreneurial intention has been done. Susetyo and Lestari (2014) in his research indicates that there is an influence of a tendency to take undue risks entrepreneurial intentions. Research Agbim, et. al., (2013) shows that entrepreneurial intention influenced by risk taking propensity. People who have a tendency to take the risk or as a risk-taker has a tendency to create a business or become entrepreneurs. The same research results are also shown in research Sanchez and Sanchez (2014), the risk-taking propensity affect entrepreneurial intentions. Variations entrepreneurial intentions can also be seen by gender. Some studies show that men have a higher entrepreneurial intentions than women (DiMauro and Musumeci, 2011; Dawson and Henley, 2012; Sanchez and Sanchez, 2014).

2. LITERATURE REVIEW

One of the key factors or underlying factors that makes a person to have a career as an entrepreneur is entrepreneurial intentions. This entrepreneurial intentions become viral factors trigger the formation or development of a business. Some definitions of entrepreneurship intentions expressed by several authors. Peng, et. al., (2012) defines the entrepreneurial intentions as mental orientation such desires, dreams and expectations influence the choice of an entrepreneurial person. Drennan and Saleh (2008) defines the intention of entrepreneurship as essential and inherent to create or increase a business in itself. According to Katz and Gartner (1988) in Indarti and Rostiani (2008), entrepreneurial intentions is defined as the process of getting an update and then can be used for the establishment of a business. Then, according to Delmar and Davidsson (2000); Kruger, et. al., (2000) in Agbim, et. al., (2013), entrepreneurial intentions interpreted as a gesture in which a person has an interest in the business establishment and enforcement of social norms is closely related to entrepreneurship in the future.

The relationship between risk and entrepreneurship very closely. Dawson and Henley (2012) explains that the key characteristics of an entrepreneur is taking risks, then a wide variety of attitudes towards risk, one of which is taking a risk, is closely connected with the formation and development of new businesses, in such matters, these entrepreneurial intentions. Research Agbim, et. al., (2013) shows that entrepreneurial intention influenced by risk taking propensity. People who have a tendency to take the risk or as a risk-taker has a tendency to create a business or become entrepreneurs. Research conducted by Koudstaal,

et. al., (2014) showed that the entrepreneurs and managers have avoid the level of risk (risk aversion) is lower than the employee, but when compared between entrepreneurs and managers, the entrepreneur has to avoid the risk level that is lower than the manager. It means more entrepreneurs have the attitude to risk compared to managers and employees. Ekulan, et. al., (2005) showed that the lower level to avoid the risks both for entrepreneurs who have experienced or new, compared to non-entrepreneurs. Research from Brown, et. al., (2011) showed that entrepreneurs have a tendency to not avoid the risk (less risk aversion). Krueger, et. al., (2000) also states that from the perspective of the psychology of attitudes towards risk as the intention may bring an action. Intention is seen as an important predictor of events that precede antecedents, in this case the attitude to risk.

Hypothesis 1: Choice of Portfolio Risk and ambiguity aversion influence to the intention of entrepreneurship.

Variables associated with gender in relation to the level of risk-taking and entrepreneurial intentions, some studies show it. Empirical evidence from research in psychology shows that women have a tendency to avoid risk than men (Arch 1993; Byrnes, et. al., 1999). Related to the topic of entrepreneurship, research from DiMauro and Musumeci (2011) shows that more women than men avoid financial risk. Further Kepler and Shene (2007) shows that women entrepreneurs have a tendency to avoid the risk of higher than male entrepreneurs. Research conducted by Dawson and Henley (2012) also showed that men have on average a higher score to start a business (entrepreneurial intention) as compared to women. The results showed that women are more risk-averse (risk aversion) and obscurity (ambiguity aversion) than in men (Hartog et. al., , 2002 and Agnew et. al., 2008 in Ida and tjun tjun, 2012). Research King and Solomon (2003) showed that males had more intentions to start a business and more focus on achieving something that is material or money. While women are more likely to pay attention to intrinsic rewards, such as the meaning and purpose of life. Research from Sanchez and Sanchez (2014), indicates that there are gender differences in the context of the intention of entrepreneurship and entrepreneurial self-efficacy, men are more likely to have the intention to open a business or new business (entrepreneurial intention). Research Maes, et. al., (2014) showed that there are significant gender on entrepreneurial intentions. Entrepreneurial intentions in a woman driven by balance-oriented entrepreneurial values, whereas in men is driven by entrepreneurial achievement-oriented values.

Hypothesis 2: There is moderating effect of gender on influence portfolio risk and ambiguity aversion to the entrepreneurial intention.

3. RESEARCH METHODS

Type of this research is explanatory research, which describes the influence of the independent variables (Portfolio Choice of Risk and ambiguity aversion) to the dependent variable (Intention Entrepreneurship). The sampling technique using a non-probability sampling, with the kind of purposive sampling where the criteria that can be sampled is a freshman in college. Samples were taken at 5 Big Cities in Indonesia (Jakarta, Bandung, Surabaya, Semarang, Yogyakarta). The number of respondents in this study is 1032 students. The data collection technique is carried out by the survey, with specific use of closed and open questions questionnaire. Portfolio Choice of risk aversion preference someone inclined to resist risks. This variable is measured based on the amount of funds invested in risky assets. Portfolio Choice of ambiguity aversion describes the attitude of someone who prefers a known risk rather than risk the unknown. This

variable is measured based on the amount of funds invested in assets that contain obscurity. Choice of Variable Portfolio Risk aversion and Ambiguity measured using a questionnaire developed by Charness and Gneezy (2010). Entrepreneurial intention is defined as the desire/intention of oneself to perform an act of self-employment. This variable was measured by using a questionnaire developed by Wijaya (2007) containing 12 items of questions. One example question is “I will choose a career as an entrepreneur.”

Before testing the hypothesis, analyzing data conducted such as normality, outlier, validity and reliability test. The test results can be seen in the following explanation. Normality test results showed that all variables have a normal data for skewness of its approach 0, where for each variable skewness it: Portfolio choice of risk aversion (Risk) = 0479, the portfolio choice of moderate ambiguity aversion (MAA) = 0552, the portfolio choice of high ambiguity aversion (HAA) = 0609, the portfolio choice of uncertainty ambiguity aversion (UAA) = 0520, Entrepreneurial Intention (EI) = -0173.

For outlier test results can be seen in the table below

Table 30.1
Standard Deviation of Variables

| <i>EI</i> | <i>Risk</i> | <i>MAA</i> | <i>HAA</i> | <i>UAA</i> |
|-----------|-------------|------------|------------|------------|
| 2.06243 | 1.90816 | 2.04692 | 2.27081 | 1.92134 |
| 2.06243 | 1.90816 | 2.04692 | 2.02130 | 1.92134 |
| 1.93739 | 1.90816 | 2.04692 | 2.02130 | 1.92134 |
| | | | | |
| -2.85617 | -2.90184 | -2.93640 | -2.57949 | -2.70049 |
| -2.85617 | -2.90184 | -2.93640 | -2.57949 | -2.70049 |
| -2.85617 | -2.90184 | -2.93640 | -2.57949 | -2.70049 |

Source: processed data (2016)

The table above shows the standard deviation value of the three highest and three lowest. Therefore, it can be said the data in this study is not there is the data outliers, because the value is not more than 3.

Measurement validity is done by Confirmatory Factor Analysis (CFA). The table below shows the results of testing the validity.

In addition, for a score of anti-image correlation of each item questions > 0.5. So based on test results obtained that the validity of research instruments are valid, because it is in conformity with the criteria of validity (KMO > 0.6, Loading Factor > 0.4, no data is ambiguous, empty and distorted).

Table 30.2
Validity Test Result
KMO and Bartlett’s Test

| | |
|---|------------------------------------|
| <i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</i> | .823 |
| <i>Bartlett’s Test of Sphericity</i> | <i>Approx. Chi-Square</i> 8121.850 |
| | Df 300 |
| | Sig. .000 |

Rotated Component Matrix (a)

| <i>Items of Variable (EI)</i> | <i>Factor Loading</i> |
|-------------------------------|-----------------------|
| EI1 | .776 |
| EI3 | .782 |
| EI4 | .813 |
| EI5 | .814 |
| EI6 | .741 |
| EI7 | .781 |
| EI10 | .648 |
| EI11 | .552 |

Source: Processed data (2016)

**Table 30.3
Reliability Test Result**

| <i>Variables</i> | <i>Cronbach's Alpha</i> |
|------------------|-------------------------|
| EI | 0.885 |

Source: Processed data (2016)

From the table above, it can be seen that all the variables in this study meet the reliability test because Cronbach's Alpha values > 0.5. For variable Portfolio Choice of risk aversion (Risk) and Portfolio Choice of ambiguity aversion (MAA, HAA and UAA) reliability testing is not done because of the scale ratio.

4. RESULTS AND DISCUSSION

Testing Hypothesis 1: (Choice of Portfolio Risk and ambiguity aversion influence to the intention of entrepreneurship)

In this study testing the effect of the Choice of Portfolio Risk and ambiguity aversion to entrepreneurial intentions are tested with multiple regression analysis. The test results can be seen in the following table.

**Table 30.4
Testing Hypothesis 1
Coefficients (a)**

| <i>Model</i> | | <i>Unstandardized Coefficients</i> | | <i>Standardized Coefficients</i> | <i>t</i> | <i>Sig.</i> |
|--------------|------------|------------------------------------|-------------------|----------------------------------|----------|-------------------|
| | | <i>B</i> | <i>Std. Error</i> | <i>Beta</i> | <i>B</i> | <i>Std. Error</i> |
| 1 | (Constant) | 3.595 | .051 | | 70.132 | .000 |
| | Risk | .004 | .001 | .140 | 2.931 | .003 |
| | MAA | -.001 | .002 | -.023 | -.376 | .707 |
| | HAA | .001 | .002 | .028 | .540 | .589 |
| | UAA | .000 | .001 | .019 | .454 | .650 |

^a Dependent Variable: EI
Source: processed data (2016)

From the table above, it can be seen that the variable Portfolio Choice of risk aversion effect on entrepreneurial intentions. The results of this study support Agbim, et. al., (2013) and Sanchez and Sanchez (2014), which shows that entrepreneurial intention influenced by risk taking propensity. People who have a tendency to take the risk or as a risk-taker has a tendency to create a business or become entrepreneurs. However, researchers have additional arguments, the risk taken for an entrepreneur is a risk of moderate or reasonable, or which can be measured.

From the table above can be seen most of the variables Portfolio Choice of ambiguity aversion does not affect the entrepreneurial intentions. The author has argued since the conditions contained in the choice of portfolio choice of ambiguity aversion, where the chances of success or success is relatively small and even very small and it may also happen in real life, then it makes the respondent does not have the intention of entrepreneurship is high because it does not No one who wants to incur losses that have been invested (if it is associated with a variable Portfolio Choice of ambiguity aversion). The author also has another additional arguments, entrepreneurs tend to take the risk of moderate or reasonable so if confronted with something that is not obvious (ambiguity) they tend to not like it. The comparison can be seen with the variables of risk aversion Portfolio Choice, where the variable effect on entrepreneurial intentions.

In addition to the dimension of ambiguity aversion Moderate (MAA), this dimension has a significant effect (p value $< 0:10$). Writers have argued these dimensions affect the intention kewirasuahaan, because the level of risk in the MAA still have a level of risk that is moderate or could be measured compared to the High ambiguity of aversion (HAA) and Uncertainty ambiguity of aversion (UAA), the level of risk in the MAA is smaller.

Testing Hypothesis 2: (Gender moderating influence of Portfolio Choice Risk and ambiguity aversion to the intention of entrepreneurship)

For testing of moderating effect of gender to the model, researchers used a chow-test. The test results are as follows.

$$\begin{aligned} F &= \frac{(RSSr - RSSur)/k}{RSSur/(n_1 + n_2 - k)} \\ F &= \frac{(456.836 - (207.677 + 242.777))/2}{(207.677 + 242.777)/(446 + 576 - 2)} \\ &= \frac{3191}{441.62} \\ &= 7.23 \end{aligned}$$

From the above calculations, the importance $df = 2$ and 1020, as well as the F count = 7:23 With the level 0.05 via online calculation at the address website http://davidmlane.com/hyperstat/F_table.html, where the numerator $df = 2$, denominator $df = 1020$, and F = 7:23, obtained $p = 0.00076$. Therefore p value < 0.05 (F count $>$ F table) then it can be concluded that the regression model with observed between men and women show differences in other words the influence of the Choice of Portfolio Risk and ambiguity aversion against entrepreneurial intentions between men and women differently.

5. CONCLUSION

This study found an effect on the portfolio choice of risk to the intention of entrepreneurship, while for ambiguity aversion effect was not found. Portfolio choice of risk has a sense of risk-taking that has counting more moderate compared to the portfolio choice of ambiguity aversion. This is consistent with some theories stating that an entrepreneur will take the risk, but the risk taken is a moderate risk, the risk of which can be seen clearly arithmetic-calculation or it can be said calculating. In this study also found moderating influence of gender in the relationship between variables. More specifically, this study found the level of risk and entrepreneurial intentions of men is higher than women.

This study clearly have implications for the public, with the results of this study the intention of entrepreneurship amongst students can be enhanced by giving them an understanding that at the time wanted to do a practice of entrepreneurship needs to be considered taking moderate risk or that could be taken into account. Or with an explanation of the other side if you want to have high entrepreneurial intentions, we need to be trained on how to have a reasonable level of risk-taking or moderate. The results also imply that it should also be improved intention of entrepreneurship for women students, need to be constantly provided with information on characters entrepreneurial women who have merged in practice run kewirausahaanya, so it will hopefully be able to increase the level of intention of entrepreneurship that is at least equal to men, in the sense of desire to have success, namely the independence effort.

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